REMARKS

By this amendment, Applicant has substituted a new description of the drawings, and modified the specification. No new matter has been added. In the preparation of formal drawings, the original Figure 1B was too large for reproduction on a single drawing sheet. Accordingly, it has been split into two sheets. The changes to the drawing description reflects those changes. The changes to the specification make proper reference to the split of Figure 1B.

MARKED-UP VERSIONS OF AMENDMENTS

IN THE SPECIFICATION

Brief Description of the Drawings on page 3, beginning at line 7:

--Figure 1A is a block diagram of one embodiment of a circuit for a cable modem termination system that supports multiple downstream channels according to the teachings of the present invention.

Figure 1B is a block diagram of another embodiment of a circuit for a cable modem termination system that supports multiple downstream channels according to the teachings of the present invention.

Figures $1B_1$ and $1B_2$ are more detailed block diagrams of the embodiment of Figure 1B.

Figure 2 is a graph that illustrates one embodiment a spectrum allocation for downstream data channels for a cable modem termination system according to the teachings of the present invention.

Figure 3 is a graph that illustrates one embodiment of a spectrum allocation for upstream data channels for a cable modem termination system according to the teachings of the present invention.

Figure 4 is a block diagram of one embodiment of a system including a cable modem termination system that supports multiple downstream channels according to the teachings of the present invention.--

Second paragraph on Page 6, beginning at line 12:

--[Figure 1B is a] Figures $1B_1$ and $1B_2$ are block [diagram] diagrams of one embodiment of a circuit, indicated generally at 100, for a cable modem termination system that supports multiple downstream channels according to the teachings of the present invention. Circuit 100 advantageously increases the port density without increasing the size of the card or chassis compared to existing systems by including a plurality of media access control (MAC) circuits 106-1, . . ., 106-N on the same card or

chassis. Each of the MAC circuits 106-1, . . ., 106-N supports a separate downstream channel and a separate plurality of upstream channels. In other words, each MAC circuit 106-1, . . ., 106-N supports a separate MAC domain. The added channels allow circuit 100 to provide a higher number of homes passed compared to existing systems. Further, all of MAC circuits 106-1, . . ., 106-N share the same downstream port 114 and the same upstream ports 116-1, . . ., 116-K. Thus, circuit 100 can be used in the same physical space as existingcards or chassis, thereby increasing the port density without requiring a complete modification of the physical structure of existing systems.--

Second full paragraph on Page 9, beginning at line 14:

--Figure 4 is a block diagram of one embodiment of a system, indicated generally at 400, including a multi-channel cable modem termination system 404 that supports multiple downstream channels according to the teachings of the present invention. System 400 includes head end 402. Among other components, head end 402 includes a multi-channel CMTS 404 that supports multiple downstream channels and multiple upstream channels on a single card or chassis. Advantageously, CMTS 404 has a physical configuration that uses the same number of upstream and downstream ports as in existing cards and chassis, but provides more downstream and upstream channels than existing cards and chassis. Thus, CMTS 404 allows a larger number of subscribers to be supported than existing CMTS cards and chassis. In one embodiment, CMTS 404 is constructed as described above with respect to Figures 1A, [1B] 1B$_1$ and 1B$_2$, 2, and/or 3 --

Respectfully submitted,

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